

**STATEMENT OF DR. CHARLES E. MCQUEARY**  
**before the**  
**SENATE COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION**  
**March 4, 2003**

Chairman McCain, Senator Hollings and distinguished Members of the Committee, it is an honor to appear before you today regarding my nomination as Under Secretary for Science and Technology in the Department of Homeland Security. I am most honored to have been nominated for this position by the President, and I thank him for his confidence and support.

Senator Dole, thank you for being here this morning and thank you for your kind remarks.

This past Saturday, under the very able leadership of Secretary Ridge and Deputy Secretary England, the Department assumed operational control of the majority of agencies transferred to DHS under the Homeland Security Act. This marked the passage of a major milestone in the effort to combine these agencies and re-focus their efforts to secure and protect the Homeland. Included in this transfer were agencies with inherent research and development capabilities, all of which the Science and Technology Directorate will now oversee.

Now, more than ever, our nation needs a systematic national effort to harness Science and Technology in support of Homeland Security. Today, the United States of America possesses a vast Science and Technology enterprise. Companies, Universities, Institutes and Government Labs of all sizes conduct Research and Development across a very broad range of disciplines.

The Department of Homeland Security, and specifically the Science and Technology Directorate, will serve to focus this national capability on the defense of our homeland. It will serve as the national lead for homeland security Research and Development, and it will work with private and public entities to assure an R&D effort of sufficient size and scope to counter the threats of modern terrorism.

Creating and guiding such an effort is a major undertaking. My education and business background provide me a strong base for leading the Science and Technology Directorate, should I be confirmed. As an engineer and a senior executive, I led a large Research and Development business that designed, manufactured, installed and supported a wide variety of high technology solutions for national security and commercial customers. I understand both the size and scope of work this effort will require.

If confirmed, I will base my plans for the Department's Science and Technology work on the priorities articulated in the President's National Strategy for Homeland Security.

As identified in the National Strategy, and as provided for in the founding legislation of the Department of Homeland Security, I would engage the industrial base of our nation through the Homeland Security Advanced Research Projects Agency. It will be the role of this Agency to solicit innovative ideas from private and public members of the industry. Once identified, the agency will work to develop and demonstrate them for appropriate application. The focus will be on cutting edge, high payoff projects that fundamentally improve our ability to protect the United States and our citizens.

The Science and Technology Directorate, and HSARPA in particular, will engage in rapid prototyping, testing and evaluation of technologies that are “off the shelf”, or nearly so, and put them in the hands of appropriate users to support specific homeland security requirements. To accomplish this, the Science and Technology staff will work with the Technical Support Working Group that is managed by the Departments of State and Defense. This group has for many years accomplished this task for our armed forces.

In addition, should I be confirmed, I would foster pilot deployments of the systems and technologies developed by the Science and Technology Directorate to refine these capabilities and develop operational concepts for direct use.

The Science and Technology Directorate will work with other agencies, such as the National Institute of Science and Technology, and Departments, such as Justice, to create a capability for the development and promulgation of standards for equipment to be purchased by federal agencies and state and local governments for specific homeland security purposes. To do this, the S&D Directorate will create reference standards, develop certification protocols, and then encourage the formation of certification labs that could test this specific equipment. This process would support not only the agencies that purchase this equipment, but also the businesses that develop and produce these capabilities.

In the founding legislation there is a general mandate to support our national leadership in Science and Technology. I feel it particularly important to insure that our best minds have the opportunity to enter careers and perform research in fields important to the homeland security R&D enterprise. To that end, the Science and Technology Directorate will fund postgraduate and post doctoral fellowship programs and create scholarships in support of this mandate.

A key capability for the Science and Technology Directorate is a National Laboratory for Homeland Security. This laboratory will consist of components from several of the Department of Energy laboratories, staffed by a multidisciplinary cadre of scientists and engineers who make it their business to understand the various facets of homeland security; establish relationships with relevant stakeholders; and provide the core internal research and systems engineering expertise for the new Department's activities.

The Science and Technology Directorate will need to develop and maintain core technical expertise in life sciences research. We will exercise our responsibility for assessing the biological, chemical and radiological threat and our nation's ability to respond to them with appropriate medical countermeasures being developed at the Department of Health and Human Services.

Should I be confirmed, I would work in close collaboration with the leadership at DHHS to assure a robust effort in this area as well as the other Departments and Agencies I have already mentioned. I will also work closely with the Department of Agriculture to protect our agricultural infrastructure from terrorist activities with appropriate measures.

All of these capabilities will ultimately be focused on providing the Department of Homeland Security, and state, local, and other federal agencies with new systems and technologies for performing their missions better and making our nation safer. As our customers they will help define the problems we will need to address and the parameters for defining our success.

It will be my job to provide a Science and Technology enterprise that is up to this challenge. I will focus on the creation of a disciplined and efficient systems engineering process that delivers the appropriate homeland security capabilities as efficiently as possible, when and where they are needed.

Should the Senate confirm my appointment, I would welcome the opportunity to work with the Congress, and this Committee in particular, to accomplish the important mission of homeland security before us. Thank you for your consideration of my nomination, and for the honor of appearing before you today.

I am happy to answer any questions you may have.